REMARKS

Claims 1-23, 25, and 26 are all the claims pending in the application. By this Amendment, Applicant cancels claim 24 and adds claim 26. In addition, to further clarify the invention, claims 1, 7, 18, 23, and 25 are amended.

Summary of the Office Action

The Examiner withdrew the previous rejections. The Examiner, however, found new grounds for rejecting the claims. In particular, claims 1-15 and 17-25 stand rejected under 35 U.S.C. § 103(a).

Prior Art Rejections

Claims 1-3, 5-9, 12, 15, and 17-24 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious over U.S. Patent No. 6,477,164 to Vargo et al. (hereinafter "Vargo") in view of U.S. Patent No. 6,075,789 to Kasslin et al. (hereinafter "Kasslin"). Applicant respectfully traverses these rejections in view of the following comments.

Of the rejected claims only claims 1, 7, and 18 are independent. This response initially focuses on these independent claims. Independent claims 1, 7, and 18, among a number of unique features, includes some variation of having the forming means set a single packet occupation field to ON when the superpacket is occupied with a single packet or a portion of the single packet.

The Examiner acknowledges that Vargo does not teach or suggest having a single packet not fit into a transmux 144, the alleged superpacket, (see pages 7-8 of the Office Action). In fact, Vargo does not teach or suggest having a transmux 144 be composed of only one packet or

a portion of a packet. Therefore, Vargo does not teach or suggest a single packet occupation information being turned ON because it is impossible for the transmux 144 of Vargo to contain only one packet.

In general, Vargo deals with the latency in voice over IP (VOI) systems. In Vargo, the transmux 124 received data packets 142 from a number of gateways and reorganizes these data packets 142 into the transmux packets 144 based on the destination transmux. A predetermined number of data packets 142 are linked together to form a transmux packet 144 (Fig. 4; col. 5, line 60 to col. 6, line 23). Thus, the more packets are to be routed to the destination transmux, the faster transmux packets 144 will fill up, and the faster the transmux packets will be sent. The transmux packets 144 are routed over the internet network 132 using a conventional network technique (col. 6, lines 31 to 35). That is, Vargo teaches aggregating a predetermined number of data packets 142 into a transmux packet 144 (see Fig. 4).

In other word, in Vargo, no single packet occupation information as set forth in the independent claims 1, 7, and 18 is taught or suggest since the transmux packet 144 will always have a predetermined number of data packets and not one packet or only a portion thereof. Clearly, such an informational field would be of no use in the system of Vargo. Kasslin fails to cure the deficient teachings of Vargo.

Kasslin relates to a system for adopting packets from a digital packet network to a radio frequency system for transmission of audio and data services to a mobile environment (col. 2, lines 55 to 66). In Kasslin's DAB system, the service providers can be allocated data capacity dynamically. Kasslin teaches that in DAB system, the data are transmitted in packets according

to FIG. 4A, consisting of a header field, data field, and checksum. The packet header contains information of the packet length that may be 24, 48, 72, or 96 bytes, continuity index, first/last packet information, address identifying the service component, a command, and the length of the actual data field. A data field contains the actual data conveyed and, if necessary, padding bits (Fig. 4A; col. 3, lines 44 to 58).

In Kasslin, the data field is made up of the data group. As soon as the data field of the data group is full, the entire data group will be mechanically divided into fixed-length segments, without paying attention to the information or the fields of the data group. Each segment constitutes the data field segment of the DOB data packet. When the header is added to each of the fixed-length segments obtained by dividing, the result is a DAB data packet according to FIG. 4A, which will be transferred on the transmission path (col. 3, line 59 to col. 4, line 4).

In other words, Kasslin teaches taking a data group having a group header, a session header, and a data stream provided by the data service provider, and splitting the data group into a number of fixed segments and placing each segment in the data field of the DAB packet (col. 4, lines 5 to 37). Kasslin further teaches applying this method to the ATM cells (Fig. 7; col. 7, lines 7 to 11) and FR frame packets (Fig. 8; col. 7, line 58 to col. 8, line 5). With respect to the FR frames, Kasslin teaches that for each frame packet, the system generates one Data Group. The size of the Data Group to be generated is determined by the size of the information field in the frame packet received because the information of the frame packet is to be inserted in the Data Group data field. Correspondingly, one Data Group is transferred to the receiver as separate

DAB packets. For the shortest frame data packets, one DAB packet is enough but usually the data packet has to be sent in several successive DAB packets (col. 8, lines 6 to 15).

That is, Kasslin does not teach or suggest a single packet occupational information, as set forth in the independent claims 1, 7, and 18. Kasslin teaches only having a continuity index and first/last packet information, in the event that one DAB packet is not enough for the FR data packet being transmitted, *i.e.*, all the fixed segments did not fit into a single DAB packet. In Kasslin, however, at most an entire frame packet will be in the DAB packet but not more than one frame packet (col. 8, lines 6 to 15). Clearly then, in Kasslin, there is no need to have a single packet occupation information when the entire DAB packet is only used for a single packet or a portion of the packet. In other words, Kasslin does not teach or suggest having a packet occupation information that is turned to ON, when the DAB packet is occupied by a single FR packet or a portion thereof. In short, Kasslin does not cure the deficient teachings of Vargo.

Moreover, one of ordinary skill in the art could not have combined the references in the manner suggested by the Examiner. ***Most if not all inventions arise from a combination of old elements***. *In re Kotzab*, 55 USPQ2d at 1316 (*citing In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998), (emphasis added). Thus, every element of a claimed invention may often be found in the prior art. *Id.* However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. *Id.* Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. *In re Kotzab*, 55 USPQ2d at 1316 (*citing*

In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); and *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

Although a reference need not expressly teach that the disclosure contained therein should be combined with another, ***the showing of combinability, in whatever form, must nevertheless be "clear and particular"***. *Winner International Royalty Corporation v. Ching-Rong Wang*, 202 F.3d 1340, 1348, 53 USPQ2d 1580, 1586-87 (Fed. Cir. 2000), (emphasis added). In the present case, there is no motivation to combine the references in the manner suggested by the Examiner.

For example, Vargo deals with reducing latency in VOI systems by grouping packets together into one voice packet. In particular, Vargo teaches a predetermined number of voice packets being linked together to form a transmux packet 144. (col. 5, line 60 to col. 6, line 23). Kasslin, on the other hand, can be thought of as an antithesis of Vargo's teachings. That is, Kasslin teaches segmenting a frame data packet and placing the segments in one or more DAB packets. One of ordinary skill in the art would not know how to combine the two references in the manner suggested by the Examiner at least because Vargo teaches a transmux with a number of aggregated packets and Kasslin teaches that only the shortest frame packet may fit into one DAB packet, making aggregation required by Vargo impossible. Moreover, in Kasslin, the frame packets are of a variable length , thereby making it difficult, if not nearly impossible to have the DAB packet contain a predetermined number of packets as required by Vargo's teachings.

In other words, Vargo and Kasslin address different problems of different systems and provide different solutions. One of ordinary skill in the art would not know how to combine the two references in the manner suggested by the Examiner so as to obtain a workable combination. That is, the teachings of the two references appear to be contrary to each other in that Vargo requires the transmux (alleged superpacket) to contain a predetermined number of packets and Kasslin teaches that at most one short FR data packet will fit into a DAB packet (alleged superpacket); therefore, splitting the FR packet over several DAB packets may be necessary. Consequently, the teachings of Kasslin seem to suggest that it is impossible to aggregate the data packets as required by the teachings of Vargo.

Therefore, when the superpacket is occupied with a single packet or a portion of the single packet, the forming means sets a single packet occupation field to ON, as recited in independent claims 1, 7, and 18, is not suggested or taught by the combined teachings of Vargo and Kasslin, which lack having an indicator for whether the single packet or only a portion occupies the superpacket. For at least these exemplary reasons, claims 1, 7, and 18 are patentable over the combined teachings of Vargo and Kasslin. Therefore, Applicant respectfully requests the Examiner to withdraw this rejection of claims 1, 7, and 18, and their dependent claims 2, 3, 5, 6, 8, 9, 12, 15, 17, and 19-23. Finally, claim 24 has been canceled, thereby rendering this rejection moot with respect to claim 24.

Claims 4, 10, 11, 13, 14, and 25 stand rejected as being allegedly obvious over Vargo and Kasslin in view of U.S. Patent No. 6,247,058 to Miller et al (hereinafter "Miller"). Applicant respectfully traverses these rejections in view of the following comments.

Of the rejected claims, claim 4 depends from claim 1, claims 10, 11, 13, and 14 depend on claim 7, and claim 25 depends on claim 18. Applicant has already demonstrated that the combined teachings of Vargo and Kasslin do not meet all the requirements of independent claims 1, 7, and 18. Miller is relied upon only for its teaching of the time-outs. As such, clearly, Miller fails to cure the deficient teachings of Vargo and Kasslin. Together, the combined teachings of these references would not have (and could not have) led the artisan of ordinary skill to have achieved the subject matter of claims 1, 7, and 18. Since claim 4 dependents upon claim 1, claims 10, 11, 13, and 14 depend on claim 7, and claim 25 depends on claim 18, they may be patentable at least by virtue of their dependency.

In addition, with respect to the dependent claim 25, Applicant respectfully submits that the combined teachings of Vargo, Kasslin, and Miller do not teach or suggest filling up the superpacket until no available region is left unless the process is interrupted by a time-out and, when the process is interrupted by the time-out, setting a padding information to ON to indicate presence of an available, data-free region. Miller is related to various time-outs but Miller fails to teach or suggest a time-out for filling the packet and filling up the superpacket until no available region is left unless a time-out occurs as set forth in claim 25. Moreover, the combined teachings of Vargo, Kasslin, and Miller do not teach or suggest when the time-out occurs, setting the padding information to ON to indicate presence of an available, data-free region. For at least these additional reasons, Applicant respectfully submits that claim 25 is patentable over the combined teachings of Vargo, Kasslin, and Miller.

Allowable Subject Matter

Applicant thanks the Examiner for allowing claim 16.

New Claim

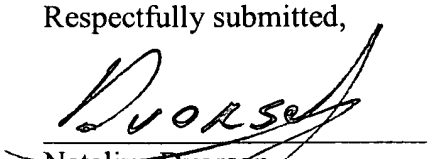
In order to provide more varied protection, Applicant adds claim 26. Claim 26 is patentable at least by virtue of its dependency on claim 18.

Conclusion and request for telephone interview

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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